

Monthly Operating Report

APRIL 2024



Rockland, MA WWTP



April 13, 2024



Mr. Chuck Heshion

Rockland Sewer Commission Chairman

587 Rear Summer Street

Rockland, MA 02370

RE: Rockland Wastewater Facility

Monthly Report—April 2024

Dear Mr. Heshion,

Please see the enclosed April 2024 Monthly Operating Report (MOR) for the Veolia Operations and Maintenance contract. I would like to personally thank Cristan Ryan of Veolia for overseeing the Maintenance portions of this report and Megan Lynch for retraining me with the MOR.

If you should have any questions, please let me know.

Sincerely,

Rick Kotouch

Veolia Project Manager

CC:

Daniel Duross

Sherri Vallie

APRIL 2024 MONTHLY OPERATING REPORT

1.0 SUMMARY:

The facility will be reporting **1** exceedance for the Monthly Average Flow during this period.

- 1) There was **0** lost time / first aid injuries throughout the month.
- 2) The facility treated a total influent flow of **116.567** MG. The average daily effluent flow for permit was **3.534** MGD.
- 3) The total rainfall for this reporting period was **4.48."**
- 4) I&I Work is ongoing.
- 5) **127** work orders were closed out with **16** additional work orders as corrective maintenance. There were also **5** emergency call outs during this reporting period.

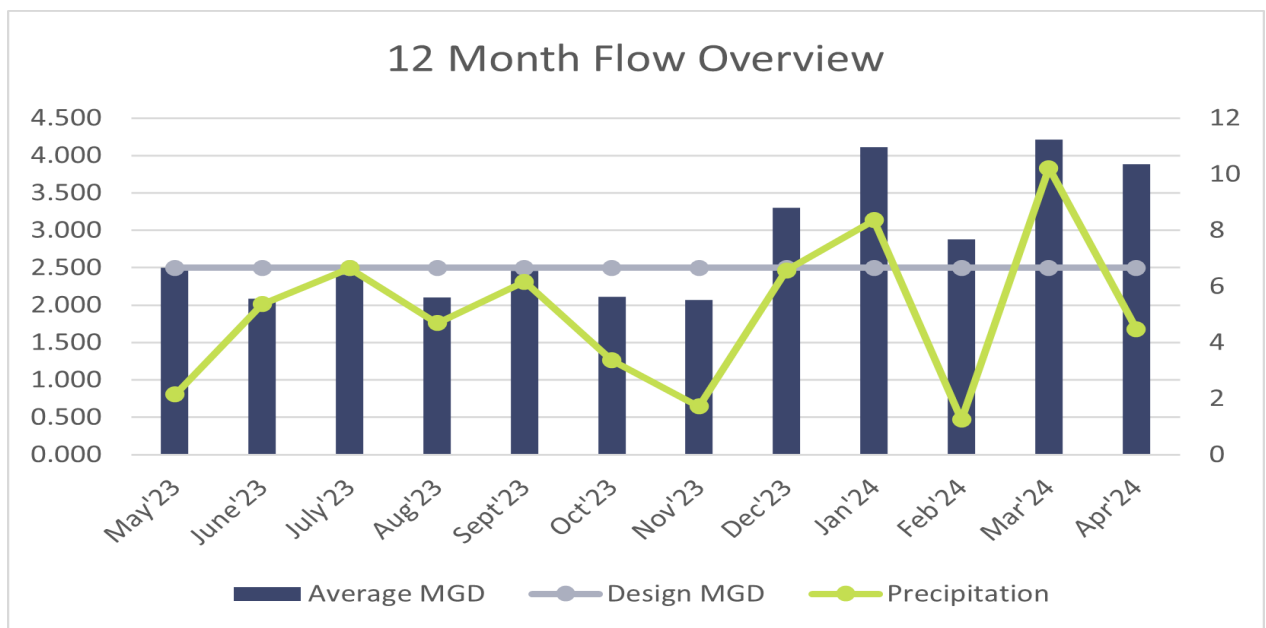
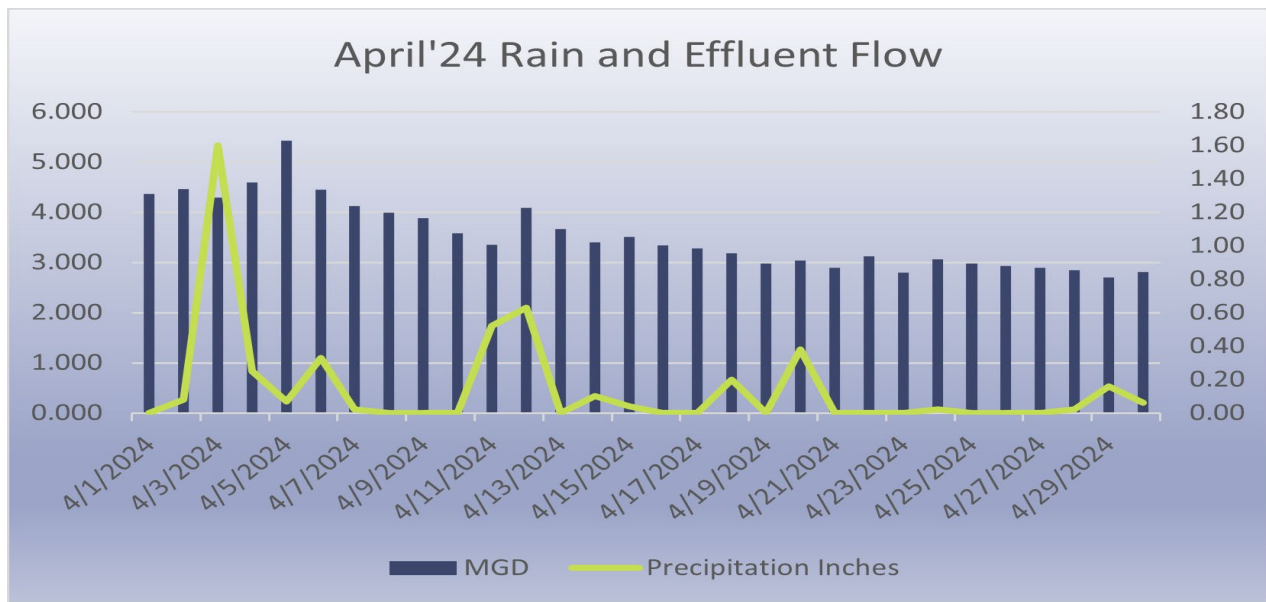
2.0 STAFFING:

Current Employee Licenses as of 04/01/2024									
		Hoisting		Wastewater			NEWEA Collections		
Employee	Title	1C Forklift	1B Boom Truck & Forklift	3M	5C	7C	I	II	IV
Richard Kotouch	Project Manager					X			X
To Be filled in May 24	Asst. Project Manager								
Steven Butts	Lab Technician					X			
Charles Amaral	Maintenance Foreman				X			X	
Garry Murrill	Operator				X			X	
Maxwell Jackson	Operator			X					
Cristian Ryan	Operator								
To Be filled in May 24	Operator								
Shaun Chaponis (Weekends)	Part-Time Operator				X		X		

3.0 FLOWS AND LOADINGS:

3.1 FLOWS, PRECIPITATION, AND WEATHER

- The facility treated a total of **116.567 MG** during the month of April. The daily average influent flow was **3.886 MGD** and the daily average effluent flow for Permit was **3.534 MGD**. This was **0.302 MGD** less than the previous months effluent average. The highest daily influent flow was recorded on April 5th at **5.983 MGD**.
- A total of **4.48"** of precipitation was recorded at the facility. The highest single day precipitation total was recorded on April 3rd at **1.60"**.
- The coldest day was on April 22nd at **29°F**. The warmest day was on April 15th at **72°F**.



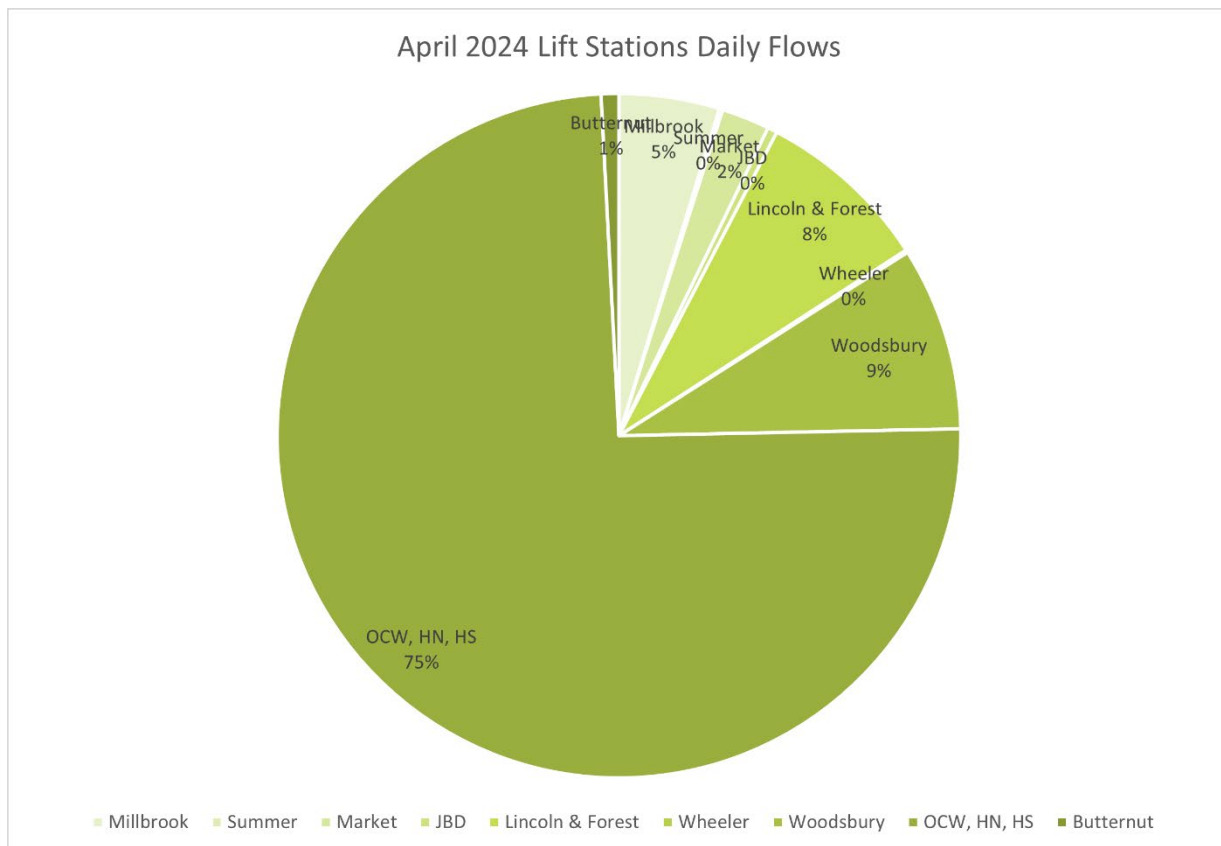
3.2 INFLUENT AND EFFLUENT FLOW TRACKING

ROCKLAND FLOW TRACKING				
Month/Year	Influent Flow	Effluent Flow	Influent Flow Moving Avg.	Effluent Flow Moving Avg.
	MGD	MGD	MGD	MGD
May '23	2.497	2.174	2.603	2.658
June '23	2.083	1.735	2.610	2.473
July '23	2.404	2.073	2.666	2.407
Aug '23	2.102	2.024	2.706	2.352
Sep '23	2.457	2.532	2.76	2.374
Oct '23	2.114	2.161	2.73	2.351
Nov '23	2.069	2.069	2.711	2.323
Dec '23	3.302	2.79	2.702	2.365
Jan '24	4.11	3.477	2.689	2.458
Feb '24	2.884	2.905	2.684	2.479
Mar '24	4.212	3.836	2.735	2.499
Apr '24	3.886	3.534	2.843	2.609

3.3 LIFT STATION FLOWS

The lift stations accounted for **20,841,300** gallons throughout the month or **17%** of the total plant flow. Please note that monthly lift station flow totals are purely estimates based off of pump run hours and estimated flow rates. Values are not intended to in any way be used as design capacity volumes for potential future rehab / replacement projects.

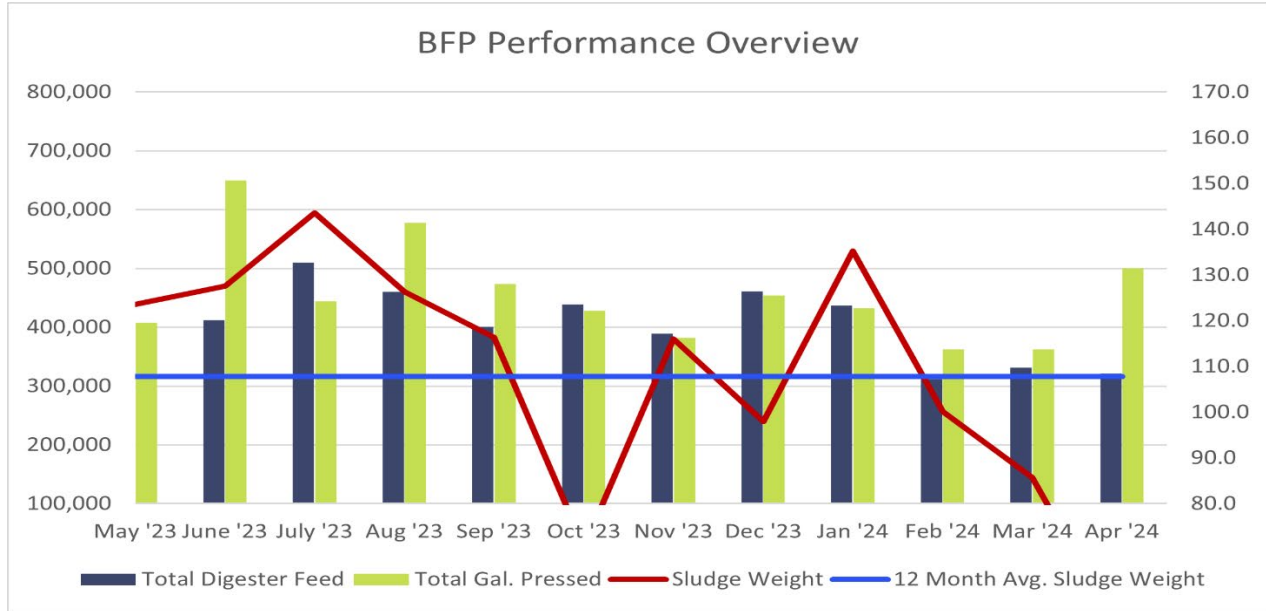
Total Flows for April 2024		
Station	Total Gallons	
Millbrook	989,280	
Summer	34,080	
Market	474,000	
John Burke	95,040	
Lincoln, Forest	1,716,000	
Wheeler	26,100	
Woodsbury	1,809,000	
OCW, HN, HS	15,523,200	
Butternut	174,600	
Total:	20,841,300	



Lift Station Monthly Average Daily Flows (GPD)												
Month	Millbrook	Summer	Market	John Burke	Lincoln	Forrest	Wheeler	Woodbury	Old Country Way	Hingham North	Hingham South	Butternut
	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD	GPD
Apr '23	46,209	994	15,054	3,180	3,343	57,150	861	52,714	53,325	137,507	170,486	3857
May '23	36,566	874	15,321	4,226	2,786	49,800	784	40,436	52,425	145,800	180,514	2796
June '23	32,516	831	12,964	2,983	2,250	50,100	746	34,393	49,575	33,264	178,200	2411
July '23	32,554	960	13,339	2,897	2,721	54,300	778	44,550	54,300	151,971	174,343	2,475
Aug '23	43,894	857	13,875	3,180	3,086	57,600	5,001	58,243	67,200	180,707	219,858	4,146
Sep '23	30,356	857	13,554	1,637	2,679	51,300	765	45,321	52,650	153,900	166,628	2,379
Oct '23	36,720	866	14,250	1,843	2,550	50,850	784	57,343	50,325	145,414	156,986	2,025
Nov '23	30,047	857	13,286	3,137	2,743	58,050	1,080	36,450	46,650	130,757	145,414	2,539
Dec '23	35,833	969	14,411	2,237	2,936	59,250	791	50,079	57,300	153,128	189,000	3,536
Jan'24	36,373	1,123	18,643	2,246	3,836	62,700	849	66,793	82,050	174,729	242,614	5,271
Feb'24	32,207	909	14,946	2,949	3,536	51,000	797	47,700	56,475	148,693	177,043	4,243
Mar'24	43,470	1,320	14,411	3,317	7,500	58,200	1,061	61,714	77,625	193,436	246,471	5,529
Apr'24	31,912	1,099	15,290	3,066	2,787	52,568	842	58,355	78,852	184,994	236,903	5,632
Average GPD	36,051	963	14,565	2,838	3,289	54,836	1,165	50,315	59,904	148,792	191,112	3,434

4.0 SOLIDS HANDLING

The BFP operated a total of **164.4** hours this month and a total of **321,384** gallons were processed producing **50.89** Wet Tons of sludge that was hauled from the facility. The average BFP feed percent solids were **1.69%** and the BFP Cake average percent solids were **21.54%**.



Date	BFP Run Hours	Total Digester Feed	Total BFP Feed	Polymer Used	Actual Sludge Weight	Average Press Feed Total Solids	Average Cake Total Solids	Sludge Pick Up	Grit Removed
May '23	125.6	329,820	407,350	114.4	123.5	2.08	21.52	6.00	
June '23	183.7	411,781	649,427	155.6	127.6	1.88	22.32	8.00	
July '23	128.4	444,319	510,385	109.6	143.6	2.11	21.39	7.00	
Aug '23	161.6	459,960	577,299	128.1	126.3	2.01	22.81	7.00	
Sep '23	142.7	400,268	473,224	113.6	116.4	1.92	22.35	6.00	
Oct '23	127.4	438,575	428,509	112.0	70.5	2.00	22.64	5.00	
Nov '23	132.4	389,377	381,901	108.8	116.0	2.18	22.12	8.00	
Dec '23	150.5	460,829	454,170	137.6	97.9	2.04	21.95	6.00	
Jan '24	152.4	436,721	432,214	123.2	135.3	2.27	20.80	7.00	
Feb '24	130.5	311,234	362,674	111.2	100.1	2.05	22.41	6.00	
Mar '24	122.3	331,384	362,712	119.2	85.7	2.32	21.64	6.00	
Apr '24	164.0	321,384	500,524	131.2	50.9	1.69	21.51	6.00	
Annual Total	1,721	4,735,652	5,540,389	1,465	1,294	*****	*****	78	0.00
Avg.	143	394,638	461,699	122	108	2.05	21.96	6.5	*****

5.0 ENVIRONMENTAL COMPLIANCE

5.1 REGULATORY REPORTING

1. The EPA and MADEP APRIL NETDMR submitted in the CDX website on 5/6/2024.

5.2 NPDES COMPLIANCE

The facility will be reporting (1) exceedance(s) for the Monthly Average Flow. The actual Effluent Flow for April 2024 was **3.5** MGD and the General Permit is **2.5** MGD.

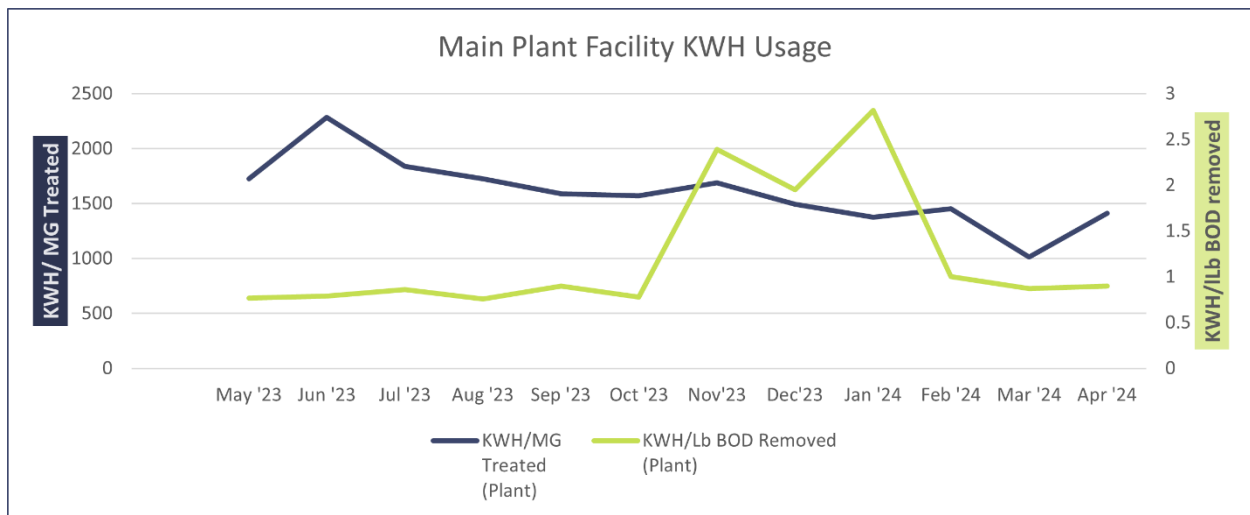
Date	Plant Flow	BOD	BOD	TSS	TSS	NH3	Total P	Ph	E. Coli Coliform	Aluminum	Copper	Dissolve Oxygen	Limits	Monthly Avg.	Weekly Avg.	Daily Max
	MGD	Mg/L	Lbs./Day	Mg/L	Lbs./Day	Mg/L	Mg/L	Ph	CFU/100 ml	Ug/L	Ug/L	Mg/L				
4/1/24	4.118							7.14					BOD			
4/2/24	4.294							7.23	1				Oct. 1 - April 30	20 Mg/L 417	20 Mg/L 417	30 Mg/l 626
4/3/24	4.287	5.0	179	8.0	286	1.70	0.09	7.09		7	5		May1 - Sept. 30	6 Mg/L 125	6 Mg/L 125	10Mg/L 209
4/4/24	3.617							7.20					TSS			
4/5/24	4.237							7.25					Oct. 1 - April 30	20 Mg/L 417	20 Mg/L 417	30 Mg/l 626
4/6/24	3.469							7.22					May1 - Sept. 30	10 Mg/L 209	10 Mg/L 209	15Mg/L 313
4/7/24	3.519							7.23					NH3			
4/8/24	3.994							7.26					Oct. 1 - Mar. 31	3.3 Mg/L	3.3 Mg/l	5.7 Mg/L
4/9/24	3.880							7.13	41				Apr. 1 - May 31	2.5 Mg/L	2.5 Mg/l	5.7 Mg/l
4/10/24	3.581	10.0	299	3.0	90		0.16	7.11					June1 - Sept. 30	1.0 Mg/L	1.0 Mg/L	1.5 Mg/L
4/11/24	3.349							7.21					Total Phosphorus			
4/12/24	4.091							7.18					Apr. 1 - Oct. 31	0.2 Mg/L	*****	*****
4/13/24	3.664							7.20					Nov. 1 - Mar. 31	1.0 Mg/L	*****	*****
4/14/24	3.396							7.21					Ph			
4/15/24	3.505							7.24						6.5 - 8.3		
4/16/24	3.343							7.22	20				E. Coli			
4/17/24	3.274	8.0	218	3.0	82	3.70	0.15	7.27					*****	126 CFU/100 ml	*****	409 CFU/100 ml
4/18/24	3.188							7.22					Aluminum			
4/19/24	2.976					0.40		7.18					*****	88 ug/l	*****	*****
4/20/24	3.034							7.04					Copper			
4/21/24	2.893							7.04								
4/22/24	3.120							7.12								
4/23/24	2.802							7.27	43							
4/24/24	3.060	3.0	77	2.0	51		0.11	7.14								
4/25/24	2.974							7.20								
4/26/24	2.929							7.17								
4/27/24	2.899							7.06								
4/28/24	2.849							7.15								
4/29/24	2.700							7.22								
4/30/24	2.809							7.14	34							
Daily Max	4.294	10.00	298	8.0	286	3.7	0.16	7.27	43.00	*****	*****	*****	May 1 - Sept. 30			> 7.4 mg/L
Daily Min.	2.700	*****	*****	*****	*****	*****	*****	7.04	*****	*****	*****	*****				Plant Flow
Month Avg.	3.395	6.5	193	4.0	127	1.9	0.13	7.18	16	7	5	*****				2.5 MGD

6.0 ENERGY CONSUMPTION

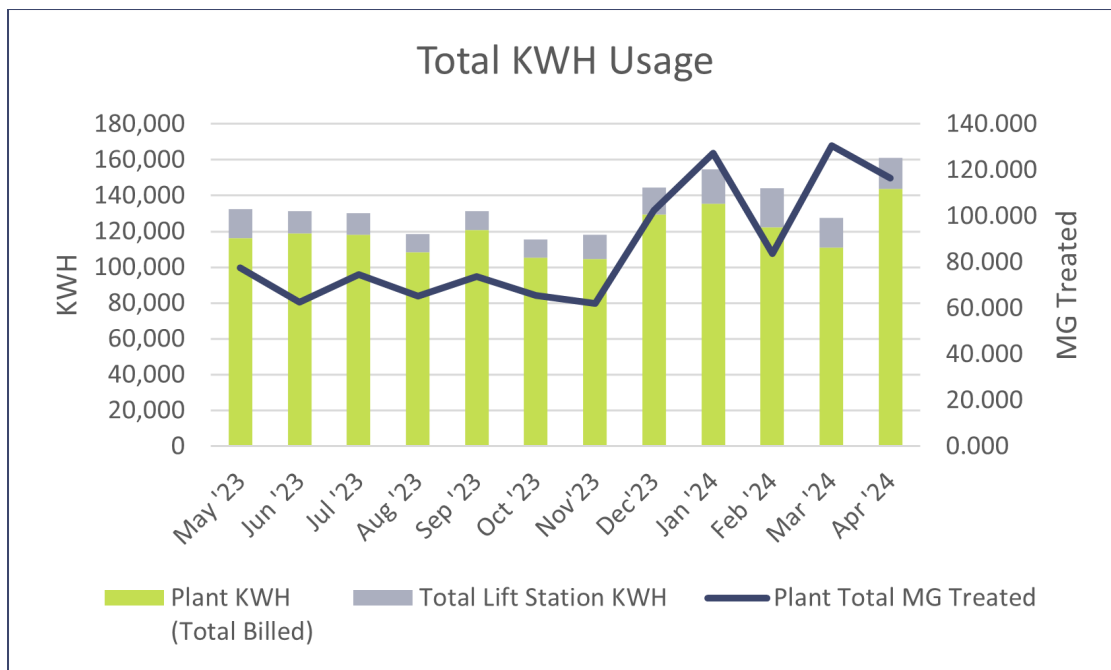
6.1 ELECTRICAL OVERVIEW

The Facility used a total of **161,151 KWH** for the month of April 2024. The Main Plant accounted for **143,700 KWH** and the lift stations used **17,451 KWH**. The KWH/ MG treated at the plant was **1,451** and the KWH/Lb. of BOD removed was **0.90** for the month.

Monthly Energy Consumption										
Month	Plant Average Daily Flow (NO HFMP)	Plant Total Influent Flow	Plant KWH (Total Billed)	KWH/MG Treated (Plant)	Plant Lbs BOD Removed	KWH/Lb BOD Removed (Plant)	Off Peak Demand (Plant)	Peak Demand (Plant)	Total Lift Station KWH	Total KWH (Plant & Stations)
	MGD	MG	KWH	KWH/MG	Lbs	KWH/Lb	KW	KW	KWH	KWH
May '23	2.50	77.40	116,400	1,727	151,373	0.77	198	210	15,893	132,293
Jun '23	1.73	52.04	118,800	2,283	15,021	0.79	183	189	12,637	131,437
Jul '23	2.07	64.26	118,200	1,839	137,759	0.86	183	201	12,127	130,327
Aug '23	2.02	62.74	108,300	1,726	142,542	0.76	222	231	10,113	118,413
Sep '23	2.53	75.95	120,600	1,588	134,488	0.9	192	201	10,893	131,493
Oct '23	2.16	67.00	105,300	1,572	134,616	0.78	195	213	10,331	115,631
Nov'23	2.07	62.06	104,700	1,687	43,777	2.39	195	201	13,297	117,997
Dec'23	2.79	86.49	129,300	1,495	66,318	1.95	207	234	15,313	144,613
Jan'24	3.18	98.54	135,600	1,376	48,027	2.82	261	273	18,956	154,556
Feb'24	2.90	84.23	122,400	1,453	122,094	1.00	213	231	21,708	144,108
Mar'24	3.58	110.89	111,000	1,001	128,077	0.87	222	216	16,633	127,633
Apr'24	3.40	101.85	143,700	1,411	158,901	0.90	228	237	17,451	161,151
Average	2.58	78.62	119,525	1,597	106,916	1.23	208	220	14,613	134,138



Monthly Lift Station KWH														
Month	Hingham North	Hingham South	Spruce	Butternut	Old Country Way	Market	Woodsbury	Lincoln	Forest	Wheeler	Summer	Milbrook	John Burke	Total
May '23	3,531	4,100	176	0	1,174	781	1,447	311	2,179	82	65	1,922	125	15,893
Jun '23	2,373	3,800	114	69	956	695	1,034	201	1,587	57	59	1,459	233	12,637
Jul '23	2,040	4,200	145	62	887	409	1,116	186	1,714	65	63	1,064	176	12,127
Aug '23	1,810	3,600	157	57	897	306	868	156	1,159	56	58	891	98	10,113
Sep '23	2,145	3,400	109	58	911	313	838	163	1,933	59	56	818	90	10,893
Oct '23	1,646	3,400	226	53	911	403	967	188	1,478	56	52	874	77	10,331
Nov '23	2,204	3,700	151	60	1,003	792	1,523	257	1,894	91	61	1,389	172	13,297
Dec '23	2,498	4,700	202	64	1,158	886	1,199	337	2,420	65	62	1,488	234	15,313
Jan '24	3,114	6,100	271	83	1,385	1,032	1,648	365	2,724	65	70	1,846	253	18,956
Feb '24	4,218	7,000	735	96	1,548	943	1,177	316	2,131	58	61	1,408	256	21,708
Mar '24	2,595	5,400	945	76	1,267	943	1,177	316	2,131	58	61	1,408	256	16,633
Apr '24	2,833	5,900	112	103	1,471	844	1,512	309	2,366	65	80	1,616	240	17,451
Average	2,584	4,608	279	65	1,131	696	1,209	259	1,976	65	62	1,349	184	14,613



7.0 MAINTENANCE

7.1 WORK ORDER OVERVIEW

WO Type	Total This Month	Total This Year
Preventative Maintenance	166	1,711
Corrective Maintenance	16	164
Emergency Call Outs Total	9	48

7.2 EMERGENCY CALL OUTS FOR THE MONTH

Type	Total this Month	Total this Year
Sewer Back Up / Collection System	2	7
Pump Station	0	20
Plant	3	17
Odor	1	1
Power Outages	0	5
Total:	6	50

7.3 INSPECTIONS AND CALIBRATIONS

1. All pump station alarms are checked monthly.
2. Eye wash station inspections are completed weekly.
3. Fire extinguisher inspections are completed monthly.
4. Dependable Petroleum UST Inspections are completed monthly.
5. Annual lab equipment inspections completed by Economy Lab Services.

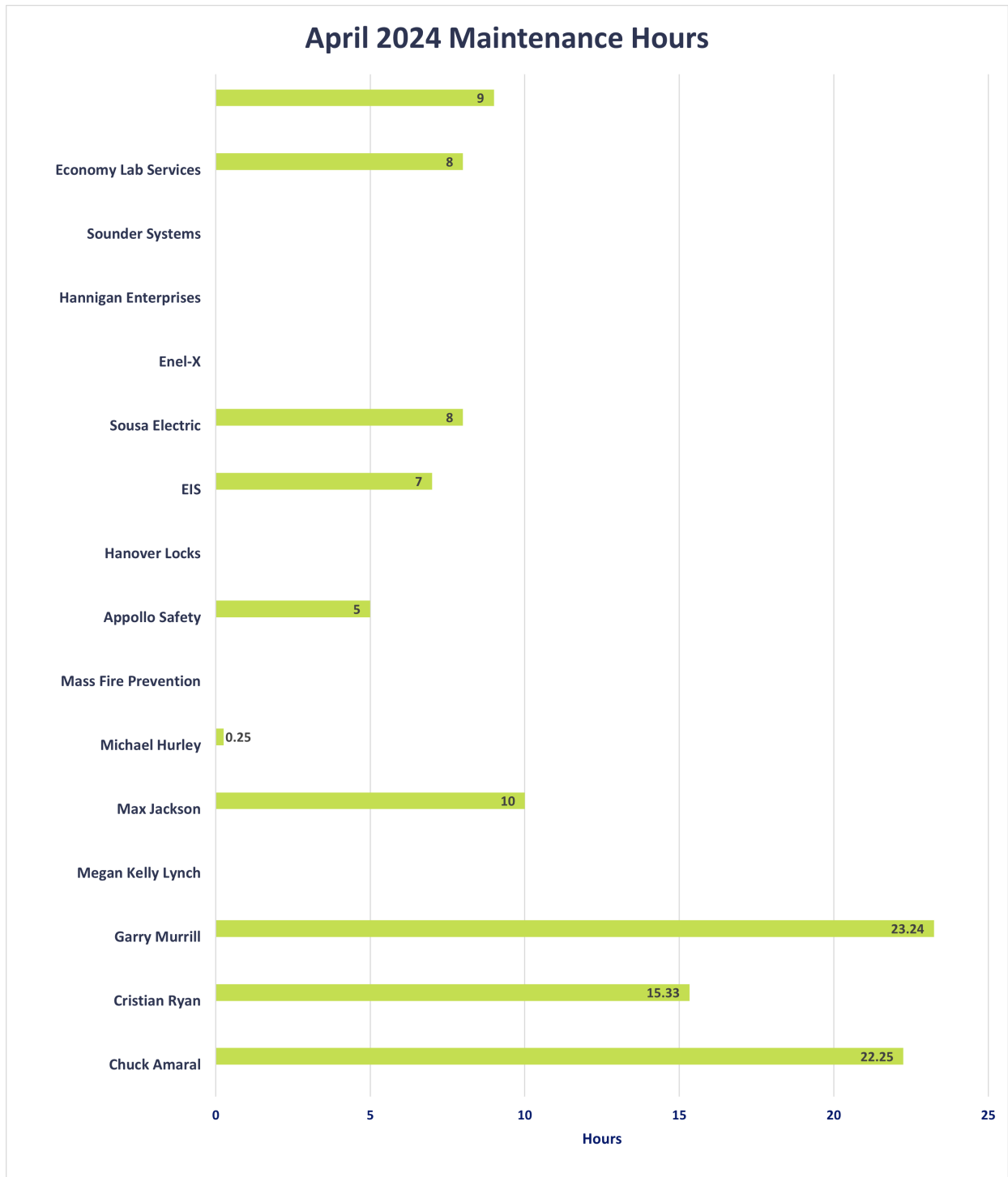
7.4 COLLECTION SYSTEM AND IPP ASSISTANCE PERFORMED BY VEOLIA

COLLECTION SYSTEM ASSISTANCE:

Type	Total This Month	Total This Year
Sewer Inspection / Tie-Ins	0	1
Sewer Location mark Outs	84	622
Sewer Back Up	1	4

7.5 WORK ORDER STATISTICS

There were 108.2 total reported maintenance hours during the month. Of this total, outside contractors accounted for 35% with **38** hours recorded.



8.0 FINANCIAL ACCOUNTING- REPAIR / MAINTENANCE (JULY '23 – JUNE '24)

Item	Budget	Spent Month	Spent Year	Remaining
R & M (Project)	\$100,000.00	\$13,949.60	\$92,352.46	\$7,647.54

8.1 SIGNIFICANT R&M PURCHASES

1. Hannigan Enterprises performed annual maintenance on the HSS Godwin Pump - \$2,319.27
2. Purchased a Pully Air Compressor from Fleet Products for the HSS Godwin Pump - \$1,943.94
3. Hanover Lock replaced two Door Locks at the Plant – \$1,446.00
4. Cranes 101 replaced Truck Reel & Switch on the Boom Truck – \$1,383.91
5. Economy Lab Services performed annual Lab Equipment Calibrations – \$1,160.00

9.0 ATTACHED REPORTS

- Discharge Monitoring Report
- HACH WIMS Data Reports
- Cumulative and Monthly Violation Reports
- Financial Reports
- Solids Removal Summary